

**AMENDMENT TO THE DRAWINGS**

The attached sheet of drawings include changes to Figs. 3A -3D and replace the original sheets, inclusive of Figs. 3A-3C and Fig. 3D.

FIG. 3A – section lines B-B and C-C have been changed to 3B-3B and 3C-3C. respectively.

FIGS. 3A-D – the lines depicting the various lengths, planes and axes have been darkened, and in Fig. 3A reference numeral "C" has been added.

Attachments: Replacement Sheets (Figs. 3A-3D)

## REMARKS

Reconsideration of the present application is respectfully requested.

A preferred embodiment of a male element for percussive rock drilling is depicted in Figs. 3A, 3B and 3C. It includes an external thread 12 disposed adjacent a front end portion of the male element. An end surface of the male element comprises an abutment surface 14 for the transfer of impact waves. The thread 12 includes, adjacent a front end thereof, a full profile region of first cross-sectional area X which is constant (see Fig. 3B), wherein an imaginary cylinder C touches the crest of the full profile region. The thread includes a last thread turn 15 whose cross-sectional area gradually increases to be greater than the first cross-sectional area of the full profile region to define a thread exit. The full profile region extends all the way to the last turn, as is evident from Fig. 3A.

New claim 16, which replaces previous claim 1, recites the above-described structure. Claim 1 stands rejected as anticipated by Liljebrand et al. That reference discloses a male element (see Fig. 2) which includes a thread whose cross-sectional area is smaller adjacent a front end of the element as compared to a rear end of the thread. Thus, an imaginary cylinder having a diameter D1 could be drawn in Fig. 2 which touches the crest of the small cross-sectional area of the thread. The thread also includes a rear end which defines a thread exit (e.g., located near the lead line for reference numeral 23). In contrast to the presently claimed invention, the thread portion 15A of Liljebrand et al. does not extend all the way to the last turn of the thread. Rather, the thread portion 15A terminates substantially forwardly thereof.

Therefore, it will be appreciated that claim 16 recites a structure that is markedly different from that of Liljebrand et al.

The rejection of independent claim 7 is respectfully traversed. Claim 7 recites, *inter alia*, that the quotient of the length of the internal thread divided by the diameter of the imaginary cylinder lies within the range of 1-2. In the Official Action, attention was directed to paragraph 0017 of Liljebrand et al. which recites length and diameter dimensions of the internal thread. It is presumed that it was instead intended that paragraph 0018 be referenced, because paragraph 0017 describes the thread 16B which is located near the mouth of the recess, not the thread located near the abutment surface 30. Since the claimed "distance" is to be measured from the abutment surface, it is assumed that the thread 16A of Liljebrand et al. was intended to be relied upon. However, the dimensions for thread 16A recited in paragraph 18 do not take into account the non-threaded cylindrical portion 29 located in the recess between the abutment surface 30 and the inner end of the thread 16A. Since the presently claimed "distance" is measured from the abutment surface, it would be necessary to add-in the length of such cylindrical portion when determining the corresponding "length" in Liljebrand et al. However, no dimensions for the cylindrical portion are provided, so the recited dimensions are of little use.

One could attempt to actually measure the corresponding distance in Fig. 3 of Liljebrand et al., as shown in the attached copy thereof, where an imaginary cylinder touching the crests of thread 16A has been drawn. Since the point at which the cylinder stops touching the thread crests cannot be precisely determined, the distance L has been approximated. The resulting ratio of distance L to diameter D3 measures out to be less than 1.

Accordingly, it is submitted that claim 7 distinguishes patentably over Liljebrand et al. whether or not considered together with Larsson.

Previous claim 12 has been replaced by new claim 17 which recites the subject matter of claim 16, in combination with subject matter from claim 7. Accordingly, it is submitted that claim 17 is allowable for the same reasons as claims 16 and 7.

The description has been amended to recite language now used in the claims, and which describes structure that is apparent from the original disclosure.

In light of the foregoing, it is submitted that the application is in condition for allowance.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date October 4, 2005

By:

  
Alan E. Kopecki

Registration No. 25,813

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

